

STOL CH 801 WING ASSEMBLY

SECTION 6

“INSTALLING THE BOTTOM REAR WING SKINS”

Compass Check

1. Position the skin on the spar.
2. Square the ribs up to the predrilled holes in the skin.
3. Drill a few holes to lock the skin to the spar.
4. Drill rib holes.
5. Rivet in place.

STOL CH 801 WING ASSEMBLY

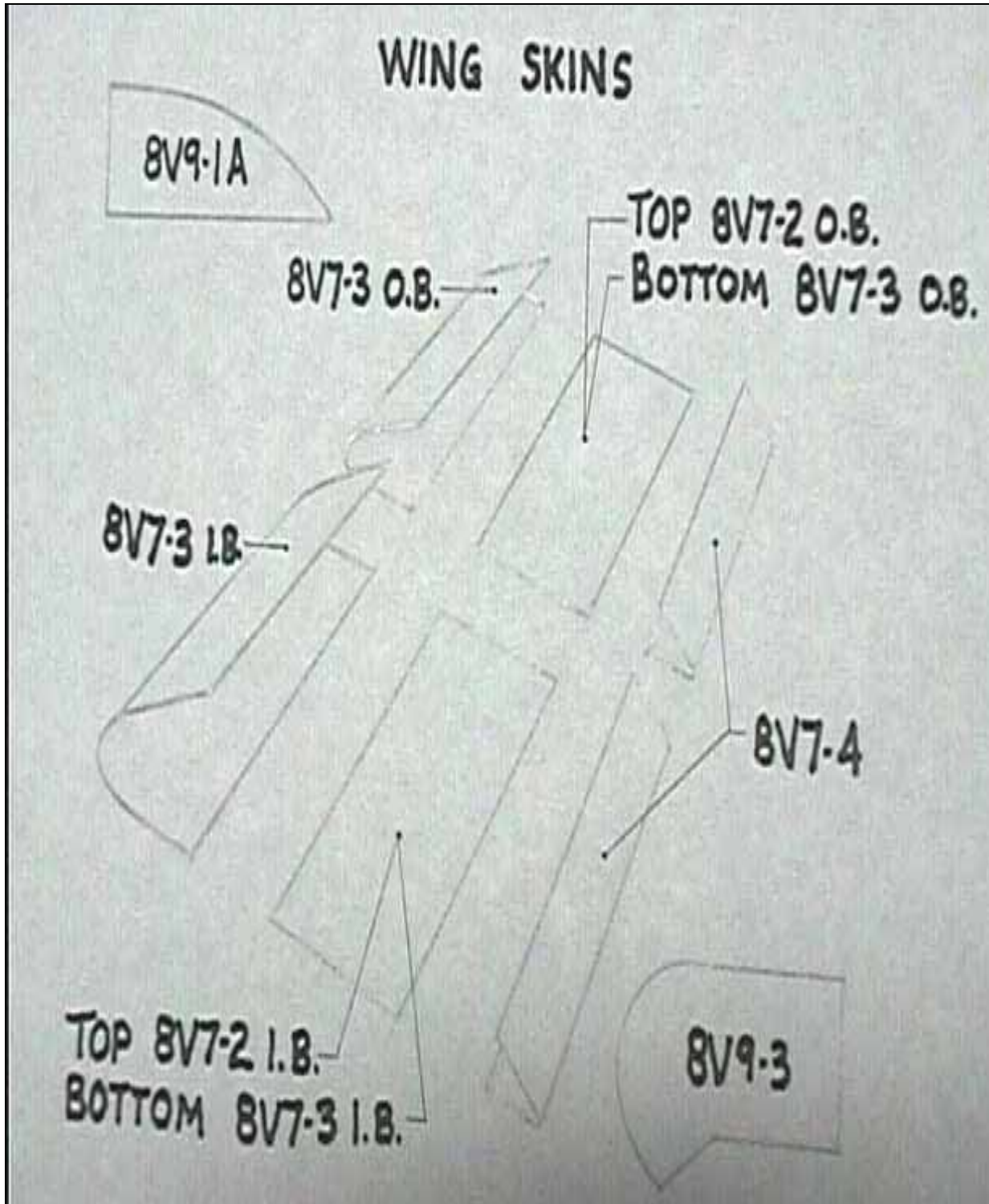
SECTION 6

“INSTALLING THE BOTTOM REAR WING SKINS”

Helpful Building Tips

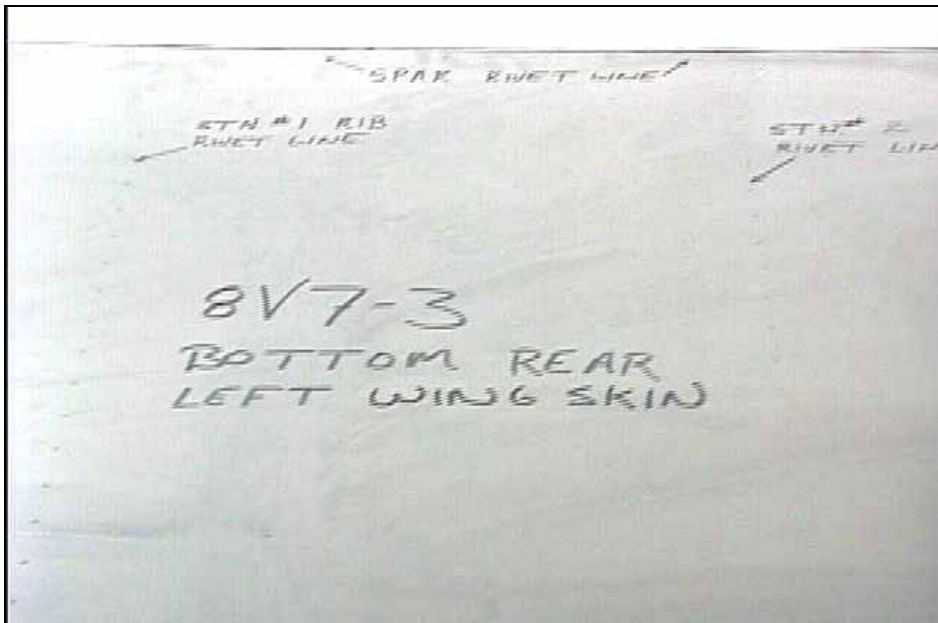
1. Work on a flat table and keep the spar clamped to it.
2. Use the skin as a “large square”, working off the spar edge to square up the wing skeleton.
3. Check alignments and position of the flaperon slots before doing any drilling.
4. Take your time.

Section 6: INSTALLING THE BOTTOM REAR WING SKINS



file V200-97

Photo V6-0



file V-64

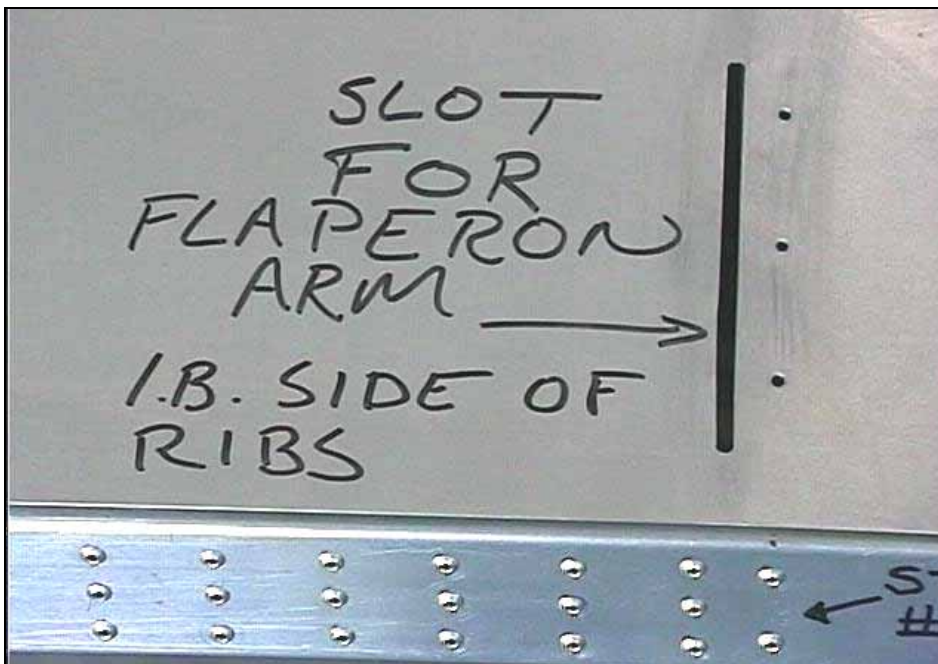
Photo V6-1

The bottom rear skin 8V7-3 is made in two pieces identified as bottom rear I/B skin and bottom rear O/B skin.

Skin 8V7-3 I/B covers the area from rib to rib to station #6.

It will be the first skin to be installed.

The wing skin is interchangeable left wing or right wing.



file V-74

Photo V6-2

The slots for the flaperon arms are precut at the factory.

Check the position of the flaperon slot and rib. The correct location here will confirm the orientation of the skin.

Cleco a flaperon arm in place. It will help confirm your positioning of the skin.



file V-65

Photo V6-3

Check alignment on all rib rivet lines.
 Consider the skin edges and the centers of the predrilled holes to be a giant square which will true up the skeleton.

The operative word here is "check". Time spent now confirming the skin is in the correct position prior to doing any drilling will result in a superior finished product

Position the skin with its front edge flush with the forward edge of the spar and the predrilled rib holes lined up with the rib flange centerlines. Slide the skin sideways until the rib centerlines line up along their entire length.



file V-66

Photo V6-4

When the alignment is correct, clamp the skin at its four corners.
 - Re check alignment of the rib flange center lines to the predrilled holes.
 Drill and cleco the main spar line rivet holes - every 8 or 10th hole only, at this time. Use a 3/32 drill. Do not drill any holes in the rear spar.

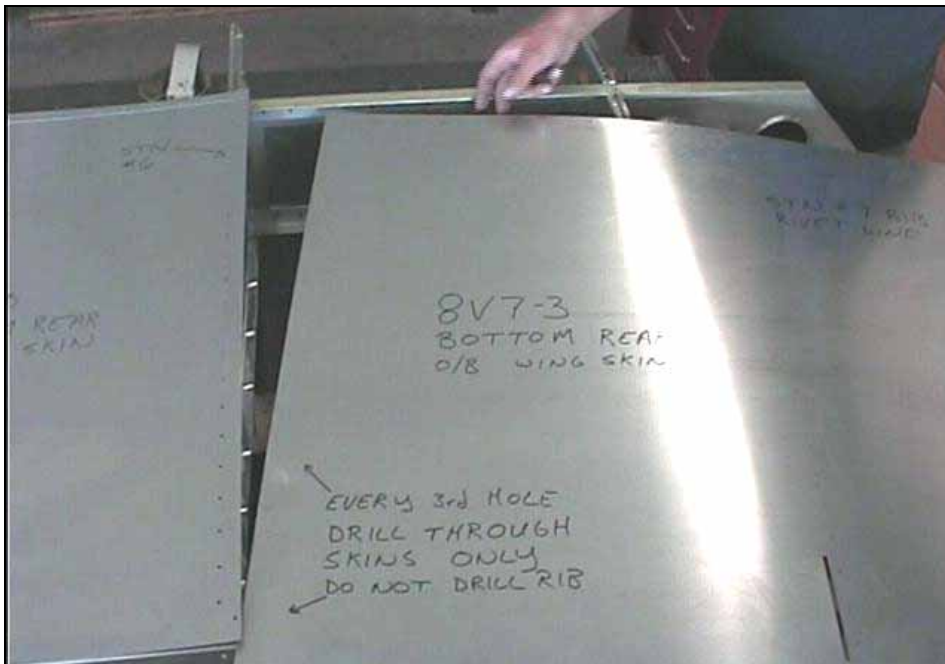


file V-68

Photo V6-5

Keeping a close eye on the center lines and clecoing well as you drill will ensure good results.

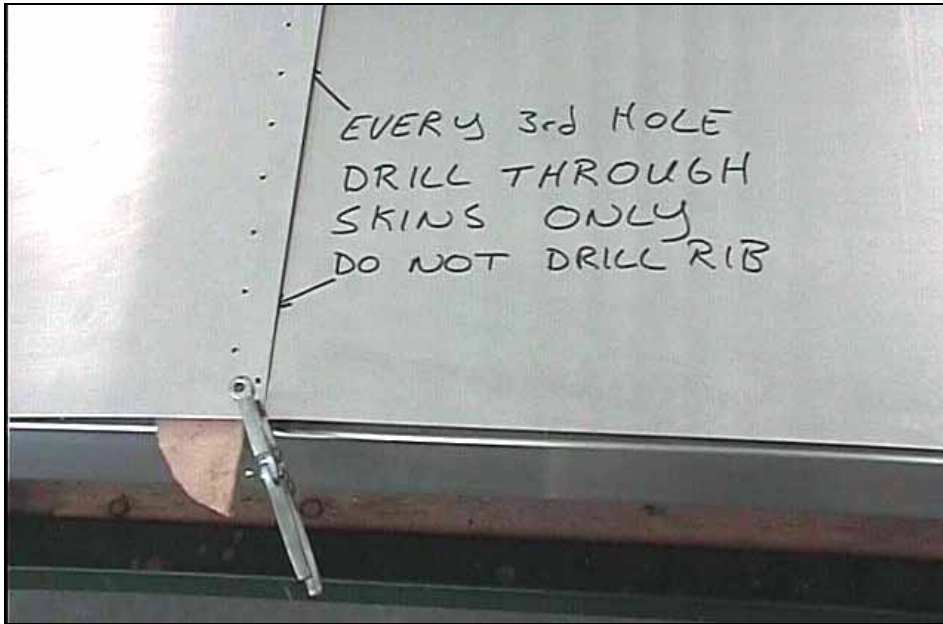
All the rib rivet holes may be drilled at this time, using a 3/32" drill bit.



file V-70

Photo V6-6

Put the O/B rear skin in place (8V7-3).
Position it in the same manor as the previous skin starting at rib station #6.
Slide the O/B skin over rib 6, but under the I/B skin.



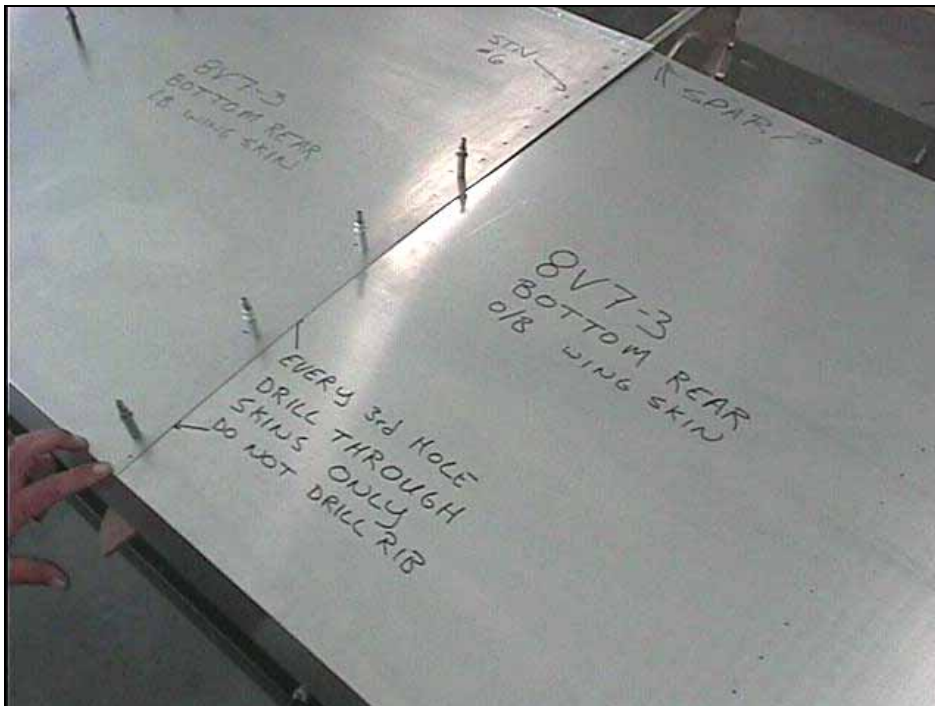
file V-71

Photo V6-7

Cleco as drilling proceeds.

Align 8V7-3 O/B with the previously installed portion of 8V7-3 I/B, the forward edge of the main spar and rib #7's flange centerline with the predrilled holes in the skin.

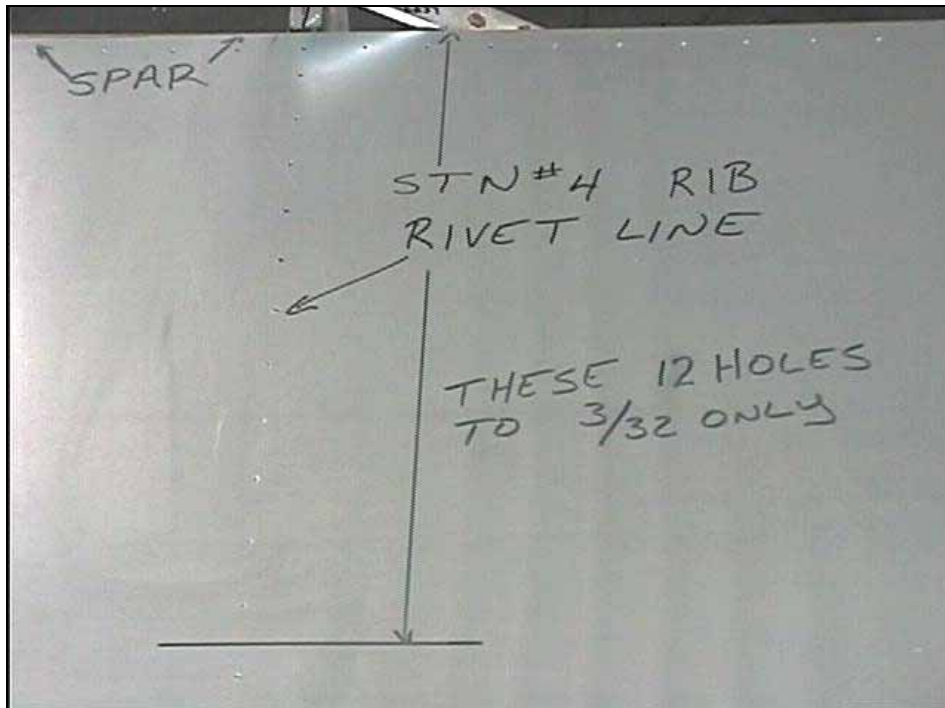
Slide a thin piece of wood under the skins and drill every 3rd hole. Do not drill into the rib.



file V-73

Photo V6-8

Drill the rest of the rib rivet holes - 3/32". Remove the thin wood and cleco both skins to rib #6. Align #7 and drill its rivet holes. Cleco



file V-69

Photo V6-9

The 3/32 holes indicated in the photo and any holes in the spar should not be opened up with the #30 drill size at this time.

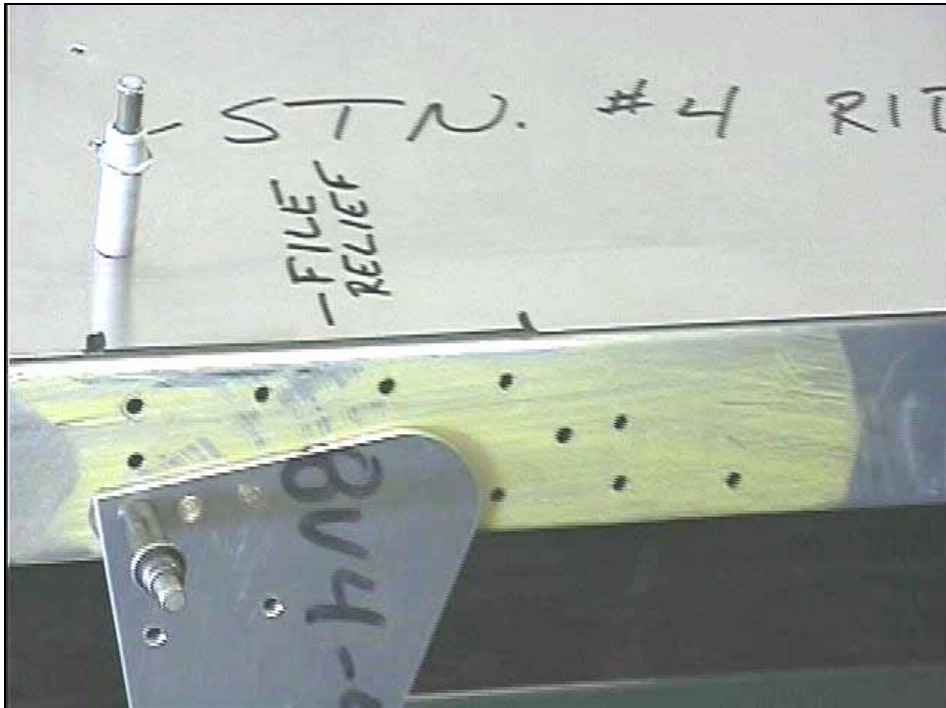
When everything to this point has been checked, open all rib rivet holes except those shown in the photo above, with a #30 drill.



file V-75

Photo V6-10

Cleco 8V4-4 in place and mark where it intersects with the skin, on the skin.

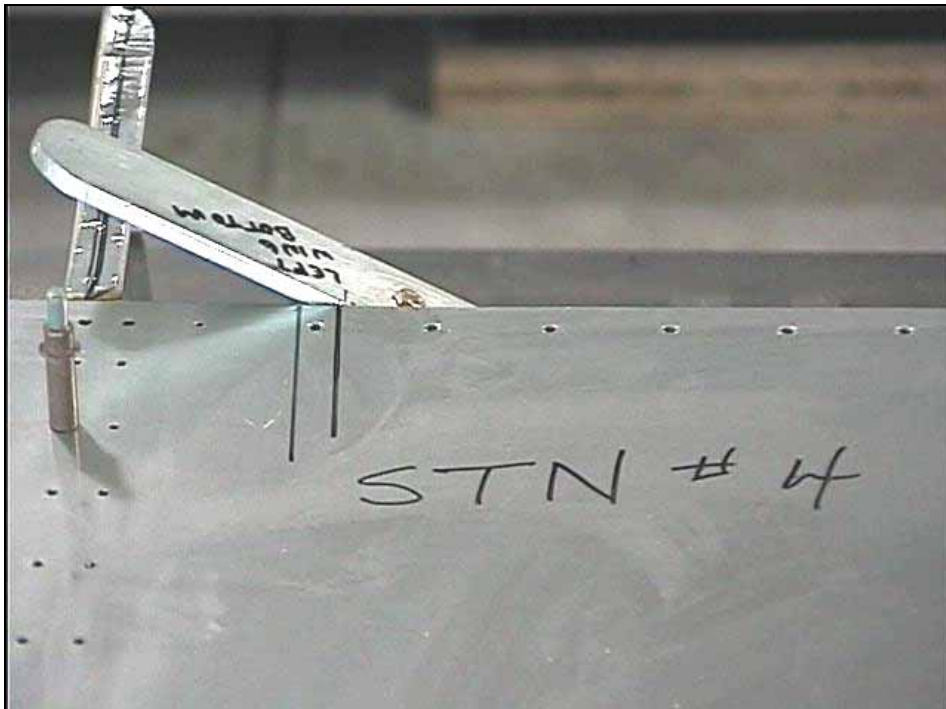


file V-76

Photo V6-11

Do not rivet 8V4-4 in place at this time.

A 1mm - 2mm relief is to be filed in the skin to clear 8V4-4.



file V-78

Photo V6-12

Extend lines from the strut pickup onto the rear skin. These reference lines are required later when installing the leading edge skin.

Remove the two skins and deburr all holes. Re-cleco the skins in position. Place and pull rivets in all the holes which have been opened to #30 drill size except for the six holes in each rib closest to the main spar.

I have checked my work and parts list and confirm to myself, that all items listed in this portion of the elevator hinge have been installed.

Signed: _____ Date: _____

Revision List:

Revision	Summary	Revised By:	Date:
3.0	Reformat	SH	8/18/1999